

=====

Sequence Listing could not be accepted due to errors.
See attached Validation Report.
If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).
Reviewer: Anne Corrigan
Timestamp: Mon Jun 18 19:13:06 EDT 2007
=====

Reviewer Comments:

<210> 2554
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: synthetic
<220>
<221> misc_feature
<222> (1)..(1)
<223> 5'-3 attached terminal deoxyabasic moiety
<220>
<221> misc_feature
<222> (21)..(21)
<223> 3'-3 attached terminal deoxyabasic moiety
<220>
<221> misc_feature
<222> (20)..(21)
<223> n stands for any nucleotide
<400> 2554
nnnnnnnnnt tnnnnnnnt t
21

The above explanation for "n" is invalid: t's are at locations 20-21:
"n" is at locations 1-29--those locations need explanation.

Application No: 10758155 Version No: 2.0

Input Set:**Output Set:**

Started: 2007-06-18 18:53:12.969
Finished: 2007-06-18 18:53:30.516
Elapsed: 0 hr(s) 0 min(s) 17 sec(s) 547 ms
Total Warnings: 2752
Total Errors: 33
No. of SeqIDs Defined: 2753
Actual SeqID Count: 2753

| Error code | Error Description |
|------------|---|
| W 213 | Artificial or Unknown found in <213> in SEQ ID (1) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (2) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (3) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (4) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (5) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (6) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (7) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (8) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (9) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (10) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (11) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (12) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (13) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (14) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (15) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (16) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (17) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (18) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (19) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (20) |

Input Set:

Output Set:

Started: 2007-06-18 18:53:12.969
Finished: 2007-06-18 18:53:30.516
Elapsed: 0 hr(s) 0 min(s) 17 sec(s) 547 ms
Total Warnings: 2752
Total Errors: 33
No. of SeqIDs Defined: 2753
Actual SeqID Count: 2753

| Error code | Error Description |
|------------|---|
| | This error has occurred more than 20 times, will not be displayed |
| W 251 | Found intentionally skipped sequence in SEQID (2446) |
| W 333 | tabs used in amino acid numbering SEQID (2446) |
| E 342 | 'n' position not defined found at POS: 2 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 3 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 4 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 5 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 6 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 7 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 8 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 9 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 12 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 13 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 14 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 15 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 16 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 17 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 18 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 19 SEQID(2554) |
| E 342 | 'n' position not defined found at POS: 1 SEQID(2555) |
| E 342 | 'n' position not defined found at POS: 2 SEQID(2555) |
| E 342 | 'n' position not defined found at POS: 3 SEQID(2555) |

Input Set:

Output Set:

Started: 2007-06-18 18:53:12.969
Finished: 2007-06-18 18:53:30.516
Elapsed: 0 hr(s) 0 min(s) 17 sec(s) 547 ms
Total Warnings: 2752
Total Errors: 33
No. of SeqIDs Defined: 2753
Actual SeqID Count: 2753

| Error code | Error Description |
|------------|---|
| E 342 | 'n' position not defined found at POS: 4 SEQID(2555) This error has occurred more than 20 times, will not be displayed |

SEQUENCE LISTING

<110> Sirna Therapeutics, Inc.
 McSwiggen, James
 Beigelman, Leonid
 Pavco, Pamela

<120> RNA Interference Mediated Inhibition of Vascular Endothelial
 Growth Factor and Vascular Endothelial Growth Factor Receptor
 Gene Expression Using Short Interfering Nucleic Acid (siNA)

<130> 400/141 (MBHB02742-N)

<140> 10758155

<141> 2004-01-12

<150> 10/758,155

<151> 2004-01-12

<150> US 10/665,951

<151> 2003-09-18

<150> US 10/664,668

<151> 2003-09-18

<150> PCT/US 03/05022

<151> 2003-02-20

<150> US 60/399,348

<151> 2002-07-29

<150> US 60/393,796

<151> 2002-07-03

<150> US 10/287,949

<151> 2002-11-04

<150> US 10/306,747

<151> 2002-11-27

<150> PCT/US 02/17674

<151> 2002-05-29

<150> US 60/358,580

<151> 2002-02-20

<150> US 60/363,124

<151> 2002-03-11

<150> US 60/386,782

<151> 2002-06-06

<150> US 60/406,784

<151> 2002-08-29

<150> US 60/408,378

<151> 2002-09-05

<150> US 60/409,293

<151> 2002-09-09

<150> US 60/440,129

<151> 2003-01-15

<150> US 60/334,461

<151> 2001-01-30

<160> 2753

<170> PatentIn version 3.3

<210> 1

<211> 19

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 1

gcggacacuc cucucggcu

19

<210> 2

<211> 19

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 2

uccuccccgg cagcggcgg

19

<210> 3

<211> 19

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 3

gcggcucgga gcgggcucc

19

<210> 4

<211> 19

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 4
 cgggggcucgg gugcagcgg 19

<210> 5
 <211> 19
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic

<400> 5
 gccagcgggc cuggcggcg 19

<210> 6
 <211> 19
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic

<400> 6
 gaggaauacc cggggaagu 19

<210> 7
 <211> 19
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic

<400> 7
 ugguugucuc cuggcugga 19

<210> 8
 <211> 19
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic

<400> 8
 agccgcgaga cgggcgcuc 19

<210> 9
 <211> 19
 <212> RNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 9
cagggcgcgg ggccggcgg 19

<210> 10
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 10
gcggcgaacg agaggacgg 19

<210> 11
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 11
gacucuggcg gccgggucg 19

<210> 12
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 12
guuggccggg ggagcgcg 19

<210> 13
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 13
ggcaccgggc gagcaggcc 19

<210> 14

<211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 14
 cgcgucgcgc ucaccaugg 19

 <210> 15
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 15
 gucagcuacu gggacaccg 19

 <210> 16
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 16
 gggguccugc ugugcgcg 19

 <210> 17
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 17
 cugcucagcu gucugcuuc 19

 <210> 18
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 18
 cucacaggau cuaguucag 19

<210> 19
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 19
gguucaaaaau uaaaagauc 19

<210> 20
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 20
ccugaacuga guuuaaaag 19

<210> 21
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 21
ggcaccacagc acaucaugc 19

<210> 22
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 22
caagcaggcc agacacugc 19

<210> 23
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 23
 caucuccaau gcagggggg 19

<210> 24
 <211> 19
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic

<400> 24
 gaagcagccc auaaauggu 19

<210> 25
 <211> 19
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic

<400> 25
 ucuuugccug aaaugguga 19

<210> 26
 <211> 19
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic

<400> 26
 aguaaggaaa gcgaaaggc 19

<210> 27
 <211> 19
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic

<400> 27
 cugagcauaa cuaaaucug 19

<210> 28
 <211> 19
 <212> RNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 28
gccuguggaa gaaauggca 19

<210> 29
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 29
aaacaaauucu gcaguacuu 19

<210> 30
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 30
uuaaccuuga acacagcuc 19

<210> 31
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 31
caagcaaacc acacuggcu 19

<210> 32
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 32
uucuacagcu gcaaaauauc 19

<210> 33

<211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 33
 cuagcuguac cuacuucaa 19

 <210> 34
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 34
 aagaagaagg aaacagaau 19

 <210> 35
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 35
 ucugcaaucu auauauuuu 19

 <210> 36
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 36
 auuagugaua cagguagac 19

 <210> 37
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 37
 ccuuucguag agauguaca 19

<210> 38
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 38
agugaaaucc ccgaaaaua 19

<210> 39
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 39
auacacauga cugaaggaa 19

<210> 40
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 40
agggagcucg ucauucccu 19

<210> 41
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 41
ugccggguua cgucaccua 19

<210> 42
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

| | | |
|------------|-------------------------------------|-----------|
| <400> | 42 | |
| aacaucaug | uuacuuuaa | 19 |
| | | |
| <210> | 43 | |
| <211> | 19 | |
| <212> | RNA | |
| <213> | Artificial Sequence | |
| | | |
| <220> | | |
| <223> | Description of Artificial Sequence: | Synthetic |
| | | |
| <400> | 43 | |
| aaaaaguuc | cacuugaca | 19 |
| | | |
| <210> | 44 | |
| <211> | 19 | |
| <212> | RNA | |
| <213> | Artificial Sequence | |
| | | |
| <220> | | |
| <223> | Description of Artificial Sequence: | Synthetic |
| | | |
| <400> | 44 | |
| acuuugauc | cugauggaa | 19 |
| | | |
| <210> | 45 | |
| <211> | 19 | |
| <212> | RNA | |
| <213> | Artificial Sequence | |
| | | |
| <220> | | |
| <223> | Description of Artificial Sequence: | Synthetic |
| | | |
| <400> | 45 | |
| aaacgcauaa | ucugggaca | 19 |
| | | |
| <210> | 46 | |
| <211> | 19 | |
| <212> | RNA | |
| <213> | Artificial Sequence | |
| | | |
| <220> | | |
| <223> | Description of Artificial Sequence: | Synthetic |
| | | |
| <400> | 46 | |
| aguagaaagg | gcuucauca | 19 |
| | | |
| <210> | 47 | |
| <211> | 19 | |
| <212> | RNA | |
| <213> | Artificial Sequence | |

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 47
aaucaaaaug caacguaca 19

<210> 48
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 48
aaagaaaauag ggcuucuga 19

<210> 49
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 49
accugugaag caacaguca 19

<210> 50
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 50
aaugggcgauu uguauaaga 19

<210> 51
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 51
acaaacuauc ucacacauc 19

<210> 52

<211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 52
 cgacaaacca auacaauca 19

 <210> 53
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 53
 auagaugucc aaauaagca 19

 <210> 54
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 54
 acaccacgcc cagucaaaau 19

 <210> 55
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 55
 uuacuuagag gccauacuc 19

 <210> 56
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 56
 cuuguccuca auuguacug 19

| | | |
|-------|-------------------------------------|-----------|
| <210> | 57 | |
| <211> | 19 | |
| <212> | RNA | |
| <213> | Artificial Sequence | |
| <220> | | |
| <223> | Description of Artificial Sequence: | Synthetic |
| <400> | 57 | |
| | gcuaccacuc ccuugaaca | 19 |
| <210> | 58 | |
| <211> | 19 | |
| <212> | RNA | |
| <213> | Artificial Sequence | |
| <220> | | |
| <223> | Description of Artificial Sequence: | Synthetic |
| <400> | 58 | |
| | acgagaguuc aaaugaccu | 19 |
| <210> | 59 | |
| <211> | 19 | |
| <212> | RNA | |
| <213> | Artificial Sequence | |
| <220> | | |
| <223> | Description of Artificial Sequence: | Synthetic |
| <400> | 59 | |
| | uggaguuacc cugaugaaa | 19 |
| <210> | 60 | |
| <211> | 19 | |
| <212> | RNA | |
| <213> | Artificial Sequence | |
| <220> | | |
| <223> | Description of Artificial Sequence: | Synthetic |
| <400> | 60 | |
| | aaaaaauaaga gagcuuccg | 19 |
| <210> | 61 | |
| <211> | 19 | |
| <212> | RNA | |
| <213> | Artificial Sequence | |
| <220> | | |
| <223> | Description of Artificial Sequence: | Synthetic |

| | |
|---|----|
| <400> 61 | |
| guaaggcgac gaauugacc | 19 |
| | |
| <210> 62 | |
| <211> 19 | |
| <212> RNA | |
| <213> Artificial Sequence | |
| | |
| <220> | |
| <223> Description of Artificial Sequence: Synthetic | |
| | |
| <400> 62 | |
| caaagcaauu cccaugcca | 19 |
| | |
| <210> 63 | |
| <211> 19 | |
| <212> RNA | |
| <213> Artificial Sequence | |
| | |
| <220> | |
| <223> Description of Artificial Sequence: Synthetic | |
| | |
| <400> 63 | |
| aacauauucu acaguguuc | 19 |
| | |
| <210> 64 | |
| <211> 19 | |
| <212> RNA | |
| <213> Artificial Sequence | |
| | |
| <220> | |
| <223> Description of Artificial Sequence: Synthetic | |
| | |
| <400> 64 | |
| cuuacuaauug acaaaaugc | 19 |
| | |
| <210> 65 | |
| <211> 19 | |
| <212> RNA | |
| <213> Artificial Sequence | |
| | |
| <220> | |
| <223> Description of Artificial Sequence: Synthetic | |
| | |
| <400> 65 | |
| cagaacaaaag acaaaggac | 19 |
| | |
| <210> 66 | |
| <211> 19 | |
| <212> RNA | |
| <213> Artificial Sequence | |

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 66
cuuuauacuu gucguguaa 19

<210> 67
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 67
aggaguggac caucuuca 19

<210> 68
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 68
aaaucuguua acaccucag 19

<210> 69
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 69
gugcauauau augauaaag 19

<210> 70
<211> 19
<212> RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 70
gcauucauca cugugaaac 19

<210> 71

<211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 71
 caucgaaaac agcaggugc 19

 <210> 72
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 72
 cuugaaaccg uagcuggca 19

 <210> 73
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 73
 aagcggucuu accggcucu 19

 <210> 74
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 74
 ucuaugaaag ugaaggcau 19

 <210> 75
 <211> 19
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

 <400> 75
 uuucccucgc cggaaguug 19

<210> 76
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 76
guaugguuaa aagaugggu 19

<210> 77
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 77
uuaccugcga cugagaaau 19

<210> 78
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 78
ucugcucgcu auuugacuc 19

<210> 79
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 79
cguggcuacu cguaaauua 19

<210> 80
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

<400> 80

aucaaggacg uaacugaag

19

<210> 81

<211> 19

<212> RNA

<213> Artificial Sequence

<2